

In the Claims

1-34. (canceled)

35. (Withdrawn) An animal feed composition comprising, in admixture, at least 1%, by weight, of a carotenoid and at least 5%, by weight, of a phospholipid that is liquid at the body temperature of the animal.

36. (Withdrawn) The composition of claim 35, wherein the ratio of the carotenoid:phospholipid is from 1:100 to 100:1.

37. (Withdrawn) The composition of claim 35, wherein the ratio of the carotenoid:phospholipid is from 1:10 to 1:1.

38. (Withdrawn) The composition of claim 35, wherein the carotenoid is obtained from a microbial source.

39. (Withdrawn) The composition of claim 38, wherein the source is an organism selected from the group consisting of *Phaffia*, *Haematococcus*, *Schizochytrium*, and *Paracoccus* species.

40. (Withdrawn) The composition of claim 35, wherein the carotenoid is selected from the group consisting of astaxanthin, zeaxanthin, canthaxanthin, lutein, beta-carotene, and lycopene.

41. (Withdrawn) The composition of claim 35, wherein the carotenoid is a synthetic carotenoid.

42. (Withdrawn) The composition of claim 35, wherein at least 20% of the fatty acid residues of the phospholipid are polyunsaturated.

43. (Withdrawn) The composition of claim 35, wherein at least 10% of the fatty acid residues of the phospholipid have three or more double bonds.

44. (Withdrawn) The composition of claim 35, wherein at least 10% of the fatty acid residues of the phospholipid have four or more double bonds.

45. (Withdrawn) The composition of claim 35, wherein at least 20% of the fatty acid residues of the phospholipid have four or more double bonds.

46. (Withdrawn) The composition of claim 35, wherein the phospholipid is obtained from a microbial source.

47. (Withdrawn) The composition of claim 35, wherein the phospholipid is an egg lecithin.

48. (Withdrawn) The composition of claim 35, wherein the phospholipid is obtained from a source selected from the group consisting of fish, crustaceans, and shellfish.

49.-56 (Cancelled)

57. (Withdrawn) A method of pigmenting an animal or an animal-derived product, the method comprising feeding to the animal a composition comprising, in admixture, at least 1%, by weight, of a carotenoid and at least 5%, by weight, of a phospholipid that is liquid at the body temperature of the animal, whereby the animal or product becomes pigmented.

58. (Withdrawn) The method of claim 57, wherein the item that is pigmented is selected from the group consisting of an egg and a processed egg product.

59. (Withdrawn) The method of claim 57, wherein the item that is pigmented is selected from the group consisting of a whole animal, the processed flesh of an animal, and a processed animal product.

60. (Currently amended) A method of preparing a coldwater fish feed composition which provides for an increased level of carotenoids in the fish consuming same, the method comprising (a) mixing a carotenoid and phospholipids to form a mixture, wherein the phospholipids have at least 20% fatty acid residues with 4 or more double bonds and are found in PUFA-rich extracts of single cell algal microorganisms and are liquid at the body temperature of the coldwater fish to form a mixture; and (b) thereafter combining the mixture with at least one other animal feed component, such that the carotenoid makes up at least 1%, by weight, of the composition and the phospholipid makes up at least 5%, by weight, of the composition.

61. (Previously presented) The method of claim 60, wherein the mixture is incorporated into a pelleted feed composition.
62. (Previously presented) The method of claim 60, wherein the mixture is used to coat a pelleted feed composition.
63. (Previously presented) The method of claim 60, wherein the mixture is incorporated into an oil used to coat a pelleted feed composition.
64. (Previously presented) The method of claim 60, wherein multiple carotenoids are incorporated into the mixture, the combined carotenoids make up at least 1%, by weight, of the composition.
65. (Previously presented) The method of claim 60, wherein the mixing of carotenoid and phospholipids is performed under conditions sufficient to maintain the carotenoid and the phospholipid in a molecularly-associated form.
66. (Currently amended) The method of claim 65, wherein the mixing of carotenoid and phospholipids is conducted by comprise mixing selected from the group consisting of vortex mixing, high shear mixing, sonication, [[and]] or molecular level mixing.
67. (Previously presented) The method of claim 65, wherein the conditions comprise time in a range from about 5 minutes to several hours.
68. (Previously presented) The method of claim 65, wherein the conditions comprise temperature in a range from ambient temperature to about 60°C.
69. (Currently amended) The method of claim 60, wherein the single cells—algal organisms cell microorganisms are selected from the group consisting of *Cryptothecodium* sp., *Schizochytrium* sp., *Mortierella* sp., and *Paracoccus* sp.
70. (Previously presented) The method of claim 60, wherein the body temperature of the coldwater fish is less than 20°C.

71. (Currently amended) The method of claim 60, further comprising dissolving the phospholipid and carotenoid in a polar solvent before the mixing of the phospholipid and carotenoid wherein the [[a]] polar solvent is selected from the group consisting of chlorocarbons and lower alcohols.

72. (Previously presented) The method of claim 60, wherein the phospholipids comprise at least 40% DHA.